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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,721	09/09/2003	Shek Fai Lau	SHPR-01084US1	2770
23910	7590	01/05/2005	EXAMINER	
FLIESLER MEYER, LLP FOUR EMBARCADERO CENTER SUITE 400 SAN FRANCISCO, CA 94111			MCDONALD, RODNEY GLENN	
		ART UNIT	PAPER NUMBER	
		1753		

DATE MAILED: 01/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/658,721	LAU ET AL.
Examiner	Art Unit	
Rodney G. McDonald	1753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 27 October 2004.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 3-7 and 10-26 is/are allowed.
- 6) Claim(s) 1, 2, 8, 9 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All
  - b) Some \*
  - c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10-27-04</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 2, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weinberg (U.S. Pat. 5,814,135) in view of Weinberg (U.S. Pat. 5,484,472) and Ebara (Japan 58-27654).

Weinberg '135 teaches a personal air transporter-conditioner device. Weinberg '135 teaches that his unit is wearable and directs ones attention to U.S. Pat. 5,484,472, which Weinberg '135 incorporates by reference. Weinberg '135 in Fig. 1 a portable housing with a first electrode 26 in the form of a metallic needle-like emitter point. A

second electrode in the form of a metallic grid is present through which purified air exits.  
(Column 3 lines 26-32)

The metallic grid 24 is held at ground potential relative to the emitter point 26 (base and apex) so that ions produced in the corona discharge are accelerated towards the grid 24 (having openings). This results in a mass flow of air (i.e. ionized molecules pull along a large number of nonionized molecules by means of cohesive forces), which propels the purified air out through openings in the grid 24. (Column 3 lines 46-53)

In use air near the emitter point 26 becomes ionized by a corona discharge developed by a high voltage supplied by the high voltage circuit module 32. (Column 3 lines 26-32)

In Fig. 2 air is drawn through a filter 14 and outlets at the grid 24. (See Figure. 2; Column 4 lines 4-35)

The differences between Weinberg '135 and the present claims is the portability of the device utilizing a strap for placing it around a persons neck and a moisture retaining material for increasing humidity of the outgoing air.

Weinberg '472 teaches that a cord 22 can be utilized to carry the device around the user's neck (see Fig. 2b). (Column 4 lines 35-37)

The motivation for utilizing a cord is that it allows for carrying the device around a persons neck. (Column 4 lines 35-37)

Ebara teach utilizing a fabric or fibrous substance 3 from a water tank 1 by a capillary phenomenon and forcibly evaporated into air by a blower 4 to form humidified air 5. This humidified air 5 is ionized to a positive ion to a positive ion and a negative

ion by a negative needle like electrode 6 but most of the positive ion is attracted to the electrode 6 and the negative ion is under a condition directly remaining around the electrode 6 but, at the same time, discharged out of a cabinet 7 by the blower 4. (See Abstract)

The motivation for utilizing a moisture retaining material is that it allows for forming humidified air. (See Abstract)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Weinberg '135 by utilizing a means for carrying the portable device as taught by Weinberg '472 and by utilizing a moisture retaining material as taught by Ebara because it allows for carrying the device around the neck of the person and for forming humidified air.

#### ***Allowable Subject Matter***

Claims 3-7 and 10-26 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Claim 3 is allowable over the prior art of record because the prior art of record does not teach the claimed subject matter including the moisture retaining material including a further opening disposed generally in front of the opening of the second electrode.

Claims 4-7 are allowable over the prior art of record because the prior art of record does not teach the claimed subject matter including the first electrode being located closer to the intake vent than the second electrode; the second electrode

located closer to the outlet vent than the first electrode and wherein the moisture retaining material being located between the second electrode and the outlet vent.

Claims 10-12 and 23 are allowable over the prior art of record because the prior art of record does not teach the claimed subject matter including a container retaining at least one small object, wherein vibrations cause the small object to move within the container and generate noise; and a transducer to detect noise and that is generated when the small object moves within the container; wherein the ion generator turns-on in response to the transducer detecting noise.

Claims 13-15 and 24 are allowable over the prior art of record because the prior art of record does not teach the claimed subject matter including a container retaining at least one small object, wherein vibrations cause the small object to move within the container and generate force; and a transducer to detect force and that is generated when the small object moves within the container; wherein the ion generator turns-on in response to the transducer detecting force.

Claims 16-18 and 25 are allowable over the prior art of record because the prior art of record does not teach the claimed subject matter including a container retaining at least one small object, wherein vibrations cause the small object to move within the container and generate at least one of noise and force; and a transducer to detect at least one of noise and force and that is generated when the small object moves within the container; wherein the ion generator turns-on in response to the transducer detecting at least one of noise and force.

Claim 19 is allowable over the prior art of record because the prior art of record does not teach the claimed subject matter including a moisture retaining material also included in the detachable front member; wherein the detachable front member can be removed from the portable housing to allow the moisture retaining material to be easily wetted; and wherein the moisture retaining material increase the humidity of the air flow exiting the outlet vent.

Claims 20-22 are allowable over the prior art of record because the prior art of record does not teach the claimed subject matter including the housing including a detachable front member that includes the outlet vent; and a moisture retaining material also included in the detachable front member; wherein the detachable front member can be removed from the portable housing to allow the moisture retaining material to be easily wetted.

Claim 26 is allowable over the prior art of record because the prior art of record does not teach the claimed subject matter including the housing including a detachable front member that includes the outlet vent and moisture holder also included in the detachable front member.

#### ***Response to Arguments***

Applicant's arguments filed 10-27-04 have been fully considered but they are not persuasive.

The rejections to claims 3-26 have been overcome. Claims 1, 2, 8 and 9 remain rejected under the applied prior art.

In response to the argument that Ebara does not suggest to one of ordinary skill in the art to place a moisture retaining material adjacent to the outlet vent, it is argued that Ebara do suggest placing a moisture retaining material adjacent to the outlet vent. Here the Examiner is interpreting "adjacent" to mean "near or close" to the outlet. Ebara do suggest at least in the Figure of the apparatus a moisture retaining material "adjacent" to the outlet. (See Ebara discussed above)

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney G. McDonald whose telephone number is 571-272-1340. The examiner can normally be reached on M- Th with Every other Friday off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam X. Nguyen can be reached on 571-272-1342. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Rodney G. McDonald  
Primary Examiner  
Art Unit 1753

RM  
December 23, 2004